HERPETOLOGY.—*Descriptions of two new frogs from Colombia.*

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The Silver Springs South American Expedition of 1956 was organized for the purpose of collecting and bringing back to Silver Springs for exhibition and study live specimens of the fresh-water porpoise, *Inia geoffrensis* (Blainville), which occurs in the Amazon drainage. Two members of the expedition, E. Ross Allen of Ross Allen's Reptile Institute and Dr. James N. Layne, mammalogist from the University of Florida, in addition to their regular duties, found time during the evenings to collect representatives of about two dozen species of frogs. Included among them are two hylas that seem to be undescribed.

Both of these species belong to the group of South American hylas to which *Hyla leucophyllata* belongs. This group is characterized by having immaculate or nearly immaculate thighs that are bright pink or red in life; by the presence of a fold of skin (patagium) extending from the arm to the side of the body; and, as Dr. Charles F. Walker recently pointed out to me, by a pair of glandular areas in the skin of the pectoral region. Many of the species in this group are brightly marked in life.

One of these new species is a brightly marked little frog represented by two specimens that were collected on grass growing in the edge of a stream. It is with pleasure that I dedicate this species to E. Ross Allen, friend of many years standing and leader of the expedition.

Hyla alleni, n.sp. Fig. 1

Type.—Univ. Florida 8501, adult male, collected near Leticia, Amazonas Comisaria, Colombia, February 24, 1956, by James N. Layne and E. Ross Allen.

Paratype.—Univ. Florida 8502, adult male from the same locality as the type, collected March 1, 1956.

Diagnosis.—A small, brightly marked *Hyla* characterized by having bright, creamy white, supraocular spots which may join to form an interocular bar, and a row of similar spots extending from the tympanum to above the arm; by the absence of vomerine teeth; and by the presence of a pair of glandular areas in the pectoral region. From *leucophyllata* it differs in pattern and in the absence of vomerine teeth while from *sarayacuensis* and *bifurca* it differs in its smaller size and in lacking definitive white stripes along the anterior sides of the body.

Description of type.—Head broad, width greater than distance from snout to occiput; snout nearly rounded as seen from above, upper jaw very slightly projecting; eyes large and protuberant; diameter of eye greater than distance from eye to nostril; nostril very near tip of snout; interorbital space about equal to diameter of individual eye; tympanum distinct but small, not more than one-third the diameter of the eye; distance from tympanum to eye slightly less than diameter of tympanum; upper eyelids, top of head and dorsum smooth. Well developed discs on all fingers and toes; disc of second finger about equal to diameter of tympanum (disc of third finger of left hand partially removed to permit view of terminal phalanx). Fingers not particularly slender; third finger fully webbed for only about one-third its length but a slender margin of web extends distally to the base of the penultimate phalanx; fingers 3-4-2-1 in order of decreasing length with fingers 4 and 2 being nearly subequal. Toes slender, fully webbed except the fourth toe which has the web extending to the base of the penultimate phalanx; toes 4-3-5-2-1 in order of decreasing length. Heels slightly overlapping when legs are flexed with femora held at right angles to the body; knees and elbows in contact when limbs are pressed along the side; heel extending to anterior margin of eye when leg is pressed along body. A moderately developed fold of skin (patagium) extending from the back of the upper arm to the side of the body. Venter and under side of thighs rugose; under side of chin covered by loosely folded external vocal pouch which is very finely rugose. There is a pair of glandular areas in the skin of the pectoral region. Each area is about 2½ mm in diameter and lies just posterior to the insertion of the arm. The areas are separated on the median line by

about 2 mm. Tongue nearly round, not notched behind and but slightly free behind, its diameter about two-thirds the width of the mouth. Vomerine teeth absent. Choanae moderate in size, rounded, and well separated.

Fig. 1.—Dorsal view of the type of *Hyla alleni*, n. sp., Univ. Florida 8501. Drawn by Esther Coogle. × 2

Coloration of type.—Ground color above tannish brown, scattered punctulations of darker brown on the back between the eyes and the shoulder region and a similar patch of darker punctulations above the sacral region. Darker pigment is also in evidence on the elbows and in bands across the tibia. There is, above each eye, a conspicuous creamy patch that extends from the free margin of the upper lid down onto the interocular region where it approaches, but does not quite meet, its fellow from the opposite side. Similar creamy white patches make up a short, arched row of light flecks that extends from above the tympanum on each side to above the axilla where it becomes obsolescent. The dorsal surface of the thigh has some tannish pigment similar to the dorsal ground color on it but is nevertheless paler than the dorsum and is without a distinct pattern. The entire ventral surface is immaculate except for a few flecks of dark pigment on each side of the throat near the posterior portion of the lower jaw.

Measurements of type (in millimeters).—Snout-to-vent length, 22.8; head width, 8.3; tip of snout to posterior margin of tympanum, 7.7; diameter of eye, 3.0; diameter of tympanum, 1.0; hind leg (vent to tip of longest toe), 38.5; hind leg (vent to heel), 22.3.

Coloration in life.—When captured this specimen was predominately brown above and whitish below. The thighs were salmon pink below and somewhat dusky dorsally. The bars above the eyes and the row of light flecks on each side behind the head were creamy white. A few tiny flecks of a similar nature were present along the shank although these have faded somewhat in preservative.

Variation.—The only noteworthy variation between the two specimens is in the supraocular pattern. In the paratype the creamy white patches above the eyes are joined on the median line, thus forming an interocular bar that extends from the margin of the upper eyelid on one side to the margin of the upper eyelid on the other. In size the two specimens are essentially the same, the paratype having a snout-to-vent length of 22.5 mm.

The other species is a small spotted *Hyla*. In appreciation of Dr. Layne's zeal as a field collector and the care with which he kept notes on these frogs, this species may appropriately be called

Hyla laynei, n.sp. Fig. 2

Type.—Univ. Florida 8503, adult male, collected near Leticia, Amazonas Comisaria, Colombia, February 28, 1956, by James N. Layne.

Paratypes.—Univ. Florida 8504, 8505, two adult males collected at the same locality as the type, February 23 and 24, respectively.

Diagnosis.—A small, brightly marked *Hyla* characterized by having a yellowish or tannish

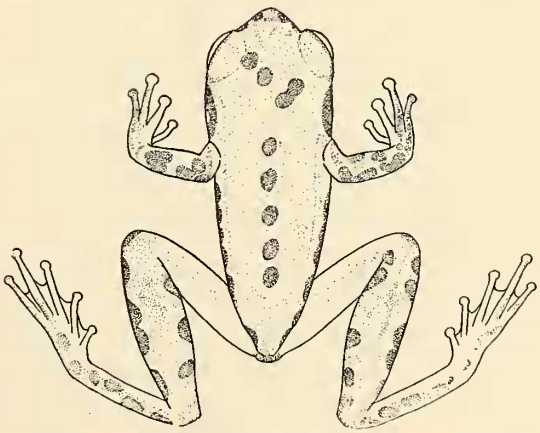

Fig. 2.—Dorsal view of the type of *Hyla laynei*, n. sp., Univ. Florida 8503. Drawn by Esther Coogle. × 2

dorsum with a mid-dorsal row of round, dark brown spots and a similar row of spots on each side where the dorsal and ventral ground colors meet; by the presence of small, rounded patches of vomerine teeth; and by the presence of a pair of glandular areas in the pectoral region. The absence of creamy white markings on a dark background distinguishes this species from the forms closely allied to *leucophyllata* while its pattern of a row of round spots down the middle of the back seems to be unique among the more somber members of the *leucophyllata* group.

Description of type.—Head broad, width slightly greater than distance from snout to occiput; snout somewhat triangular as seen from above with the tip broadly rounded; upper jaw projecting but slightly beyond tip of lower; eyes moderate in size and not pronouncedly protuberant; diameter of eye about equal to distance from eye to nostril; nostril near tip of snout; interorbital space about equal to diameter of individual eye; tympanum distinct but small, not more than one-third the diameter of the eye; distance from eye to tympanum slightly less than diameter of the latter. Upper eyelids, top of head and dorsum smooth. Well developed discs on all fingers and toes; discs of second and third fingers about equal to the size of the tympanum. Fingers not particularly slender; fingers two, three, and four webbed to the bases of their penultimate phalanges, with a narrow margin of web extending to the base of the disc of the fourth finger; fingers 3-4-2-1 in order of decreasing length. Toes slender, fully webbed except for fourth toe which is webbed to the base of the penultimate phalanx; toes 4-3-5-2-1 in order of decreasing length. Heels slightly overlapping when legs are flexed with femora held at right angles to the body; knees and elbows in contact when limbs are pressed along the side; heel extending to anterior margin of eye when leg is pressed along body. A well developed fold of skin (patagium) extending from the back of the upper arm to the side of the body. Venter strongly rugose, but under sides of thighs and chin nearly smooth; no well marked external vocal pouch. There is a pair of glandular areas in the skin of the pectoral region. Each area is about 4 mm in diameter and lies just posterior to the insertion of the arm. The paired glandular areas do not quite meet on the median line. Tongue nearly round, very slightly notched and slightly free behind; its diameter about one-half the width of the mouth. Vomerine teeth in two small oval patches between the choanae, each patch about the size of a choana and the distance between the patches about equal to the distance between a patch and a choana.

Coloration of type.—Ground color on top of head, dorsum, top of arm and top of shank a light tannish gray; a single median row of dark, chocolate brown spots extends from between the eyes to just posterior to the sacral hump. These spots are roundish and each is about a millimeter or slightly more in diameter. A dark stripe of the same nature extends from behind each eye through the tympanum and then breaks up into a row of spots similar to, but slightly smaller than, those on the back, which continues along the side to the vent. Dark spots similar to those in the row along the side occur on top of the arms, the shanks and the feet. The upper lip is whitish, while rounded brownish spots are distributed on the loreal region and upper lip. Brown pigment flecks are distributed along the margin of the lower jaw, otherwise the entire ventral surface is immaculate.

Measurements of type (in millimeters).—Snout-to-vent length, 25.6; head width, 9.5; tip of snout to posterior margin of tympanum, 7.8; diameter of eye, 3.0; diameter of tympanum, 1.2; hind leg (vent to tip of longest toe), 39.8; hind leg (vent to heel), 24.0.

Coloration in life.—In life the ground color of the dorsum was yellow and the spots were a rich brown. The hands, feet and thighs were a bright salmon pink and the venter was tinged with the same color.

Variation.—In dorsal ground color one of the paratypes is lighter than the type, the other darker. In the specimen with the lightest ground color the dark brown spots are double at two places along the back and between the eyes, thus giving the impression of a double row of spots down the back. In the darkest specimen the ground color is a light brown and consequently the dark brown spots do not show up quite so prominently. In this specimen there are five spots in the middorsal row, not counting those on top of the head and the spots are somewhat smaller than in the other two individuals. In life this specimen had a dorsal ground color of tan and the under parts of the abdomen and hind legs were salmon pink.

Structurally there is but little variation amongst the three specimens. The other two do not have the patagium quite so well developed as the type but even in them it is prominent. In none of the three is the external vocal pouch prominent.

Both of the paratypes are 24.7 mm in snout-to-vent length.

The two paratypes were collected in grass that was growing in the water at the edge of a cove of a small stream. The type was collected when calling in a wet meadow. Dr. Layne described its voice as a musical rattling trill—*kle-kle-kle-klee.*

Acknowledgments.—While full acknowledgment of all those who helped in identifying the material collected by this expedition must await publication of a general report upon this collection, I do wish at this time to thank particularly Dr. Doris M. Cochran of the United States National Museum and Dr. Robert Mertens of the Senckenberg Museum for the help they have given me concerning these two species.

EMPLOYMENT PROFILE OF SCIENTISTS, 1954–55

Comprehensive information on the employment and other characteristics of American scientists is made available in a bulletin released by the National Science Foundation. The report —*Employment Profile of Scientists in the National Register of Scientific and Technical Personnel, 1954–55*, is based on the replies of more than 94,000 scientists who supplied information to the Register. It contains the most recent data available on so large a number of scientists, including about 27,000 chemists, 16,300 biologists, 12,200 psychologists, 11,800 geologists (including 3,400 geophysicists), 11,200 physicists, 6,700 chemical engineers, 5,400 mathematicians, 3,200 meteorologists, and 400 astronomers.

More than 41 percent of the employed scientists in the Register held the Ph.D. degree; 25 percent attained a master's degree; and 32 percent had the bachelor's or first professional degree (M.D., etc.). Fewer than 2 percent of scientists reported no degree.

Scientists at the doctorate level in 1954–55 reported a median annual salary of $7,000, those with less than a Ph.D. degree $6,125 ($875 less). Highest median salary was for Ph.D. physicists and meteorologists—$7,850. Lowest salaries were for psychologists—$5,850. Salaries are not only dependent on educational attainment, but also on such things as age, sex, type of employer, and functions to which scientists devote the major part of their time. The data on salaries are less representative than the information on other employment characteristics, however, because the chemists and chemical engineers did not report salary information.

About one-half of the employed scientists held a job in industry (private companies, self-employed, nonprofit foundations, and privately controlled research foundations). Almost one-third were employed by educational institutions; and the remaining 18 percent by the Government (Federal, State, and local).

Research, development, or field exploration was the primary function of half the scientists; management or administration, of 18 percent; and teaching, of 16 percent. In this as in other respects, basic differences among the various scientific fields appear. Teaching, for example, was reported as the major function of almost 40 percent of the mathematicians, but of only 4 percent of the chemical engineers.

About 7,000 women scientists were included in the Register total of 94,000, of whom 85 percent were in three scientific fields—psychology, chemistry, and biology. The psychologists made up the largest group of women scientists—one out of every four psychologists was a woman. Next to psychology in terms of the proportion of women scientists was astronomy—one out of every six; in mathematics—one out of every ten.

The National Science Foundation Act of 1950 established the Register, which is administered jointly by the Foundation and a number of professional societies. The information in the bulletin is based on voluntary registration with these cooperating societies.